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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,427	12/27/2001	Sang-Ho Choi	P67477US0	1550
43569	7590	02/06/2006	EXAMINER	
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			HOM, SHICK C	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/026,427	CHOI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shick C. Hom	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 and 3-4 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

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U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour et al. (6,907,016) in view of Jiang et al. (6,519,457).

Regarding claims 1, 3-4:

Madour et al. disclose the method for performing an inter-packet data service node (PDSN) soft handoff (see col. 2 lines 40-55 which recite performing hand-off from a source packet zone to a target packet zone wherein the mobile node has active A10 connection and an active PPP connection with a target PDSN of the target packet zone), comprising the steps of: (a) setting up a channel passing through a target base station controller (T-BSC), a source base station controller (S-BSC), a source packet control function (S-PCF) and a source-PDSN (S-PDSN) by establishing a link between the S-BSC and the T-BSC in an active packet session mode; (b) performing a handoff between the S-BSC, the T-BSC and a mobile station (MS) (see Fig. 1 and col. 3 line 25 col. 4 line 3 which recite establishing a PPP session between the PDSN and mobile node via the base station controllers BSC-S, BSC-T, the packet control functions PCF-S, PCF-T, and packet data service nodes PDSN-S, PDSN-T); (c) transmitting or

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receiving user packet data exchanged between the MS, and the S-BSC and the T-BSC to or from the S-PDSN through the established channel link; and (d) sending or receiving user packet data exchanged between the MS and the T-BSC to or from the S-PDSN through the established channel link when the handoff is completed; (e) establishing a channel link between the T-BSC, a target packet control function (T-PCF) and a target-PDSN (T-PDSN) in a dormant packet session mode (see abstract which recite performing hand-off of the dormant mobile node to the target packet zone); (f) releasing the channel link set up between the S-BSC, the S-PCF and the S-PDSN; (g) releasing the channel link established between the S-BSC and the T-BSC, which is established in the step (a); and (h) performing a point-to-point (PPP) establishing process and a mobile Internet protocol (MIP) registering process between the MS and the T-PDSN (see col. 4 lines 4-67 which recite the PPP session with the mobile node, the MIP registration of the mobile node with the PDSN-T, and the mobile node sending messages to the BSC-T).

For claims 1, 3-4, Madour et al. disclose all the subject matter of the claimed invention with the exception of the link between the S-BSC and the T-BSC being a direct link wherein, in the step (c), one of packet data transmitted from the MS to the S-PDSN through the S-BSC and the T-BSC is selected and

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transmitted to a wireless packet data service network as in claims 1, 3, and wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC as in claim 4.

Jiang et al. from the same or similar fields of endeavor teach that it is known to provide the link between the S-BSC and the T-BSC being a direct link wherein, in the step (c), one of packet data transmitted from the MS to the S-PDSN through the S-BSC and the T-BSC is selected and transmitted to a wireless packet data service network, and wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC (see col. 4 lines 11-36 and Fig. 2, which shows the A3 direct link between the source base station controller and target base station controller, col. 1 line 58 to col. 2 line 5 which recite the A3 link between base station entities, col. 2 line 66 to col. 3 line 4 which recite using the direct link between source and target base stations for soft handoff, and col. 6 line 30 to col. 7 line 10 which recite transmitting the handoff request message). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the link between the

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S-BSC and the T-BSC being a direct link wherein, in the step (c), one of packet data transmitted from the MS to the S-PDSN through the S-BSC and the T-BSC is selected and transmitted to a wireless packet data service network, and wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC as taught by Jiang et al. in the method of performing an inter-packet data service node soft handoff of Madour et al. The link between the S-BSC and the T-BSC being a direct link wherein, in the step (c), one of packet data transmitted from the MS to the S-PDSN through the S-BSC and the T-BSC is selected and transmitted to a wireless packet data service network, and wherein the channel link established between the S-BSC and the T-BSC is an A3 channel link set up by transmitting an A7 Handoff Request message from the S-BSC to the T-BSC can be implemented by connecting the S-BSC and T-BSC of Madour et al. using the A3 direct channel link of Jiang et al. The motivation for using the A3 direct channel link for connecting the S-BSC and T-BSC as taught by Jiang et al. in the method of performing an inter-packet data service node soft handoff of Madour et al. being that it provides more efficiency for the system since the system can transmit signaling and voice information using the direct link thereby removing the

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involvement of the MSC from the soft handoff establishing phase process.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Choi et al. disclose handoff method in CDMA communication system.

Lin discloses handoff in a cellular network.

Madour discloses handoff in radio telecommunications networks.

Madour et al. disclose mobile IP mobility management at dormant hand-over in CDMA IP based cellular packet-data network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON  
PRIMARY EXAMINER